

SEQUENCE LISTING

SEQ. ID. No. 1

3bf4 3000 bp

5 CCGCCGGCCCGGGCGCCCTGGCTGCACTCAGCGCCGGAGCCGGGAGCTAGCGGCCGCCGCCATGTCCCACCAGACCGGCATCCAA
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 10 GCAGCTGAGGAAGAATCAGACAGATTAAAAATCAATGAGGTACAGACTGACGTGGGTGTGGACACTAAGCATCAAACTACAA
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SEQ. ID. No. 2

1b11 723 bp

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SEQ. ID. No. 3

cc49 1507 bp

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SEQ. ID. No. 4

cc43 2605 bp

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SEQ. ID. No. 5

41.1 1288 bp

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SEQ. ID. No. 6

GCAP 2820 bp

ATCCTAAGACGCACAGCCTGGGAAGCCAGCACTGGGGAAGTGGTGTGAGGGATGTTGGTCACTGGGGTGAAGGTGGAGCTTTC
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1b4 1205 bp

SEQ. ID. No. 8

20sa7 456 bp

SEQ. ID. No. 9

Genomic Sequence Encoding ZABC1

CCATCATATTTCTTATTTTTTTGGGCGGAGAGGGGAGACTTGCTCTGTGCCCAGGCTGGACCAGTGGTGCGATCT
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ZABC1 Open reading frame

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GAAAGTCTAATTGAGCACCGCAAGGTGCACACCAAAAAAACTGCTTTCGGTACCAGCAGCGCGCAGACAGACTCTC
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 5 GGAAGAGTTGCCATTGTCGAAGAAGTGAAGGAATCGGGGCAAGAAGGGAGCACCAGACAACGACGATTGAGTTCGG
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 TTGGTGGATGTGCTGCTTACTCCCCATGAAATTTAAATTTTACTTTCATCCTTTGAGAAGCAATGGTGAAGCTAC
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SEQ. ID. No. 11

ZABC1 Protein

MQSKVTGNMPTQSLLMYMDGPVIGSSLSGSPMEMEDALSMKGTAVVPFRATQEKVNIQIEGYMPLDCMFCSQTFTH
 SEDLNKHVLMQHRPTLCEPAVLRVEAEYLSPLDKSQVRTEPPKEKNCKENEFSCEVCGQTFRVAFDVEIHMRTHKD
 40 SFTYGCNMCGRXXXXPWLKNHMRTHNGKSGARSKLQQGLESPATINEVVQVHAESISSPYKICMVCGFLFPNK
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 GKAFRTYHQLVLHSRVHKKDRRAGAESPTMSVDGRQPGTCSPLAAPLDENGAVDRGEGGSEDGSEDGLPEGIHLD
 45 KNDDGGKIKHLTSSRECSYCGKFFRSNYLNIHLRTHTGTEKPYKCEFEYAAAQKTSRLYHLERHHKEKQTDVAEE
 VKNDGKNQDTEADLLTADSAQTKNLKRFDDGAKDVTGSPPAKQLKEMPSVFQNVLGSAVLSPAHKDQDFHKNAAAD
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 KPLNLSVGAHNCFAISLSKSLIPSTCFCTFKTFYPEVLMMHQRLHKNPDVHKNCNRKSLRSRRTGCPPAL
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 50 QQSEMFPKTSVSPAPDKTKRPETKLKPLPVAPSQPTLGSSNINGSIDYPAKNDSPWAPPGRDYFCNRSASNTAAEF
 GEPLPKRLKSSVVALDQPGANYRRGYDLPKYHMRGITSLLPQDCVYPSQALPPKPRFLSSEVDSPNVLTVQK
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SEQ. ID. NO. 12

1b1

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 55 CACTGGGCAGCAGCACTGGAGACCCAGGACCCTGTGCAGGAGCAGCTCCGGGTGACACGAGGGGACTGAAGATAC
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 65 CCACGCTTCTCCCACTGAGACAGGGGAGCAGGAGGAGGAAGCTCCCTCCAAGCCCAAGGACTCCAGCTTTTTTGA
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Filtered query sequence:

5 TGTGATATTGATTTCATGCCCTCTTGCACCTTGCCAAACATCACACGCTTG
CCATCCAGTCCACTCGATTTTGGCAGTGCAGATGAAAACTGGGAACCAT
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10 GCAGGAGNCACTTTCTCTCCAGTGCTCAGACCATGAAAGTTTTCTGATGT
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NN
5 NNNNNNNNNNNNNNNNNNCCCAATGCGGGACAGAGAATCNAAGAACTGTATTA
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0 TCCAAAAGTGGGGTGTACAGCATGAGGCATTAACAAAAATTTATTGGACC
CCACACACNN
NN
NN

Length = 743

50 Score = 177 (48.9 bits), Expect = 1.5e-58, Sum P(5) = 1.5e-58
 Identities = 41/48 (85%), Positives = 41/48 (85%), Strand = Minus / Plus

Query: 60 GACTGGATGGCAAGCGTGTGATGTTTGGCAAGGTGCAAGAGGGCATGA 13

5 Score = 154 (42.6 bits), Expect = 1.5e-58, Sum P(5) = 1.5e-58
 Identities = 34/38 (89%), Positives = 34/38 (89%), Strand = Minus / Plus

Query: 153 AGAACTTCGTTCTGAAACATGCAGGTCCTGGCATCTTG 116

10 Sbjct: 299 AGAAGTTCATCCTGAAGCATAACAGGTCCTGGCATCTTG 336

Score = 86 (23.8 bits), Expect = 1.5e-58, Sum P(5) = 1.5e-58
Identities = 22/28 (78%), Positives = 22/28 (78%), Strand = Minus / Plus

15 Query: 256 TCCTGCCTTTGCAGAATTATTCCATTAT 229

Sbjct: 193 TCCTCCTTTCACAGAATTATTCCAGGAT 220